

Name: _____ TP: _____

Failure to show all work (mark up all diagrams and write out needed formulas) and/or write in complete sentences will result in LaSalle.

* 1 revolution = 1 circumference *

1) A watermelon is cut into a series of round pieces. One piece measures 5 inches in diameter. When this round piece is cut into slices at equal angles through the center of the circle, there are 9 slices. What is the approximate length of the ring on the outer edge of one slice?



$$\frac{\text{Circumference}}{\text{Total pieces}}$$

5) The wheel of a Toyota Camry completes three revolutions once it travels 9 meters. What is the circumference of the tire? What is the area of the tire?

$$\begin{aligned} 3 \text{ revolutions} &= 9 \text{ meters} \\ \downarrow & \\ 2\pi r &= \frac{9}{3} \end{aligned}$$

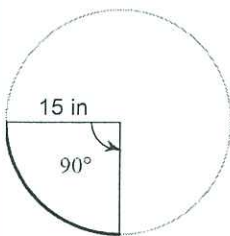
$\frac{3 \text{ circumferences}}{\text{Total distance}} = \frac{9}{3}$

3) a. Find the arc length of the circle below

$$\text{Circum.} = \frac{90}{360} \cdot 2\pi r$$

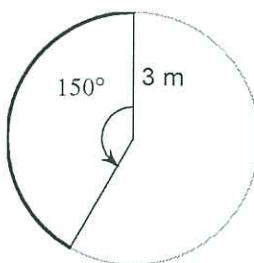
b. Find area of sector

$$\text{Area} = \frac{90}{360} \cdot \pi r^2$$



4) a. Find the arc length of the circle below (Follow #3!)

b. Find area of sector



6) After a tire of a monster has made 4 revolutions it has traveled 112 feet.

(see #5)

a) What is the circumference of the wheel?

$$4 \text{ revolutions} = \frac{\text{Total distance}}{4}$$

$$2\pi r = \frac{112}{4} \dots$$

b) What is the area of the wheel?

$$\begin{aligned} r &= \dots \\ A &= \pi r^2 \end{aligned}$$

SUBSTITUTE

c) What is a quarter of the area of the wheel?

$$\downarrow$$

$$\frac{1}{4} \cdot \text{AREA}$$

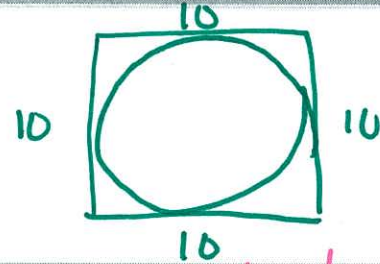
GRASP REVIEW!

(Mind the GAP with complete sentences!)

A circle is inscribed within a square. The side lengths of the square are all 10 inches. What is the area of the ~~space between the~~ circle if you are looking at just a quarter of the square?

G
Complete sentences!

R
• $S = \underline{\hspace{2cm}}$
• Area of circle =
• Quarter of square



A
* Hint! You know the diameter, so find the radius!
* It wants the AREA
* BUT only a QUARTER ($\frac{1}{4}$) of it

Complete sentences!

S

P

(complete sentences!)

Stay Ready.